

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) An embolic protection system comprising:
 - a guidewire for advancing through a vasculature, the guidewire having a distal end and a proximal end;
 - an embolic protection filter having a filter body with a distal end and a proximal end, the filter body providing for a collapsed configuration and an expanded deployed configuration;
 - the embolic protection filter ~~body~~ having a tubular guidewire path ~~for slidably receiving the guidewire~~ to permit movement of the filter relative to the guidewire when the filter is in the collapsed configuration and the expanded deployed configuration;
 - a delivery catheter ~~advanceable over the guidewire~~ for delivery of the embolic protection filter; the delivery catheter having a proximal end and a distal end, the filter being ~~deployed from~~ deployable at the distal end of the delivery catheter into the expanded deployed configuration;
 - a retrieval catheter ~~advancable over the guidewire~~ for retrieval of the filter, the retrieval catheter having a distal end and a proximal end; and
 - engagement elements for engaging the embolic protection filter with the guidewire for retrieval of the filter ~~into the retrieval catheter in the collapsed configuration.~~

2. (Currently Amended) An embolic protection system as claimed in claim 1 wherein the tubular guidewire path is in isolation from the embolic material captured within the filter body.

3. (Previously Presented) An embolic protection system as claimed in claim 1 wherein the tubular guidewire path is defined by a tubular sleeve.

4. (Original) An embolic protection system as claimed in claim 3 wherein the tubular sleeve extends from the proximal end to the distal end of the filter.

5. (Cancelled)

6. (Currently Amended) An embolic protection system as claimed in claim 1 wherein the engagement elements comprise a guidewire engagement element on the guidewire and a filter engagement element on the filter, the engagement elements co-operating to provide selective engagement and ~~positioning~~ of the filter with respect to the guidewire.

7. (Original) An embolic protection system as claimed in claim 6 wherein the engagement element of the guidewire comprises a guidewire abutment on the guidewire.

8. (Original) An embolic protection system as claimed in claim 7 wherein the guidewire abutment is located at the distal end of the guidewire.

9. (Previously Presented) An embolic protection system as claimed in claim 7 wherein the guidewire abutment is located proximal of the distal end of the guidewire.

10. (Previously Presented) An embolic protection system as claimed in claim 6 wherein the engagement element of the filter comprises a filter abutment on the filter.

11. (Original) An embolic protection system as claimed in claim 10 wherein the filter abutment is a distal abutment on the filter.

12. (Original) An embolic protection system as claimed in claim 10 wherein the filter abutment is a proximal abutment on the filter.

13. (Previously Presented) An embolic protection system as claimed in claim 10 wherein the tubular guidewire path is defined by a sleeve and the filter abutment is provided by the sleeve.

14. (Previously Presented) An embolic protection system as claimed in claim 1 wherein the engagement elements comprise releasable locking elements.

15. (Original) An embolic protection system as claimed in claim 14 wherein the releasable locking elements comprise a taper lock.

16. (Original) An embolic protection system as claimed in claim 15 wherein the guidewire engagement element comprises a locking ring on the guidewire and the filter engagement element comprises a tapered surface of the filter, the locking ring having a tapered surface which is engagable with the tapered surface of the filter to lock the filter to the guidewire.

17. (Original) An embolic protection system as claimed in claim 16 wherein the locking ring is a split ring.

18. (Previously Presented) An embolic protection system as claimed in claim 16 including a tube advancable over the guidewire, the locking ring being located between a distal end of the tube and the filter for retrieval of the filter.

19. (Currently Amended) An embolic protection system as claimed in claim 15 wherein the releasable locking ~~means includes~~ elements include a tether engagable with the filter for retrieving the filter into the retrieval catheter.

20. (Currently Amended) An embolic protection system as claimed in claim 1 comprising a deployment ~~means~~ element for moving the collapsed filter relative to the distal end of the delivery catheter.

21. (Currently Amended) An embolic protection system as claimed in claim 20 wherein the deployment ~~means~~ element comprises a tube which is advancable over the guidewire for engagement with the proximal end of the filter, the tube being movable longitudinally relative to the delivery catheter for deployment of the filter from the distal end of the delivery catheter.

22. (Currently Amended) An embolic protection system as claimed in claim 1 including a loading ~~means~~ element for loading the filter into the delivery catheter.

23. (Currently Amended) An embolic protection system as claimed in claim 22 wherein the loading ~~means~~ element comprises a funnel having a narrowed portion disposed at the distal end of the delivery catheter and an enlarged portion for receiving a proximal portion of the filter in the expanded configuration, the filter being progressively collapsed as it is moved through the funnel for loading into the delivery catheter.

24. (Currently Amended) An embolic protection system as claimed in claim 1 including engagement ~~means~~ elements for engaging the filter within the retrieval catheter.

25. (Currently Amended) An embolic protection system as claimed in claim 24 wherein the engagement ~~means~~ comprises elements are configured for a frictional

engagement between the filter body and an internal surface of the distal end of the retrieval catheter.

26. (Currently Amended) An embolic protection system as claimed in claim 24 wherein the engagement ~~means comprises~~ elements comprise projections on the inner surface of retrieval catheter adjacent the distal end thereof.

27. (Currently Amended) An embolic protection system as claimed in claim ~~[[1]]~~ 21 wherein the delivery catheter includes an elongate slot disposed in a first sidewall thereof at a first distal location which is spaced a relatively longer distance from the proximal end of the delivery catheter than from the distal end of the delivery catheter, and wherein the ~~inner deployment catheter~~ tube includes an aperture disposed in a second sidewall thereof at a second distal location which substantially corresponds with said first distal location for said elongate slot, thereby permitting co-operative movement of said filter with respect to said guidewire and associated delivery catheter and ~~deployment catheters~~ tube for selective deployment of the filter while facilitating the rapid exchange of said catheter and filter assembly over a guidewire without the utilisation of exchange wires or extension wires.

28. (Previously Presented) An embolic protection system as claimed in claim 1 wherein the embolic protection filter comprises a collapsible filter body, the proximal inlet end of the filter body having one or more inlet openings sized to allow blood and embolic material enter the filter body, the distal outlet end of the filter body having a

plurality of outlet openings sized to allow through passage of blood but to retain undesired embolic material within the filter body.

29. (Original) An embolic protection system as claimed in claim 28 where the filter comprises a collapsible filter support frame having a proximal end and a distal end, the filter support frame being movable between a collapsed position for movement during delivery through the vascular system and an extended outwardly projecting position to support the filter body in an expanded position thereby urging the filter body into apposition with the vasculature upon deployment.

30. (Previously Presented) An embolic protection system as claimed in claim 28 comprising a guide olive provided at the distal end of the filter body.

31. (Original) An embolic protection system as claimed in claim 30 comprising an inner elongate sleeve to which the filter body and the filter support frame are mounted, the sleeve having a proximal end and a distal end, the guide olive extending distally of the sleeve distal end.

32. (Currently Amended) [[A]] An embolic protection system as claimed in claim 31 wherein the proximal end of the filter support frame and the inlet end of the filter body are attached to the proximal end of the sleeve.

33. (Currently Amended) [[A]] An embolic protection system as claimed in claim 30 wherein the guide olive is integral with the filter body.

34. (Currently Amended) [[A]] An embolic protection system as claimed in claim 30 wherein the guide olive tapers distally inwardly.

35-67. (Cancelled)

68. (New) An embolic protection system as described in claim 1 wherein the delivery catheter and the retrieval catheter are provided by a single catheter.

69. (New) An embolic protection system as claimed in claim 7 wherein the guidewire abutment comprises an annular abutment on the guidewire.

70. (New) An embolic protection system as claimed in claim 69 wherein the embolic protection filter is translatable along the axis of the guidewire towards the annular abutment.

71. (New) An embolic protection system as claimed in claim 69 wherein the annular abutment comprises a tubular stop.

72. (New) An embolic protection system as claimed in claim 1 wherein the embolic protection filter is adapted for independent movement of the guidewire relative to the embolic protection filter in the deployed configuration.